

Appendix A

(Notice Of Intent & Amendments to NOI)



July 16, 2002

Bill Lanning
Bureau of Land Management
Pinedale Field Office
432 East Mill Street
Pinedale, WY 82941

Ph: (307) 367-5318

Bill;

As per our conversation on July 15, 2002 Veritas DGC Land Inc. is deleting the northern 3 miles from our project: WYW-155092

Sections being deleted:

T36N-R113W: SEC 1,2,11,12.
T36N-R112W: SEC 1 THRU 18.
T36N-R111W: SEC 6,7,18.

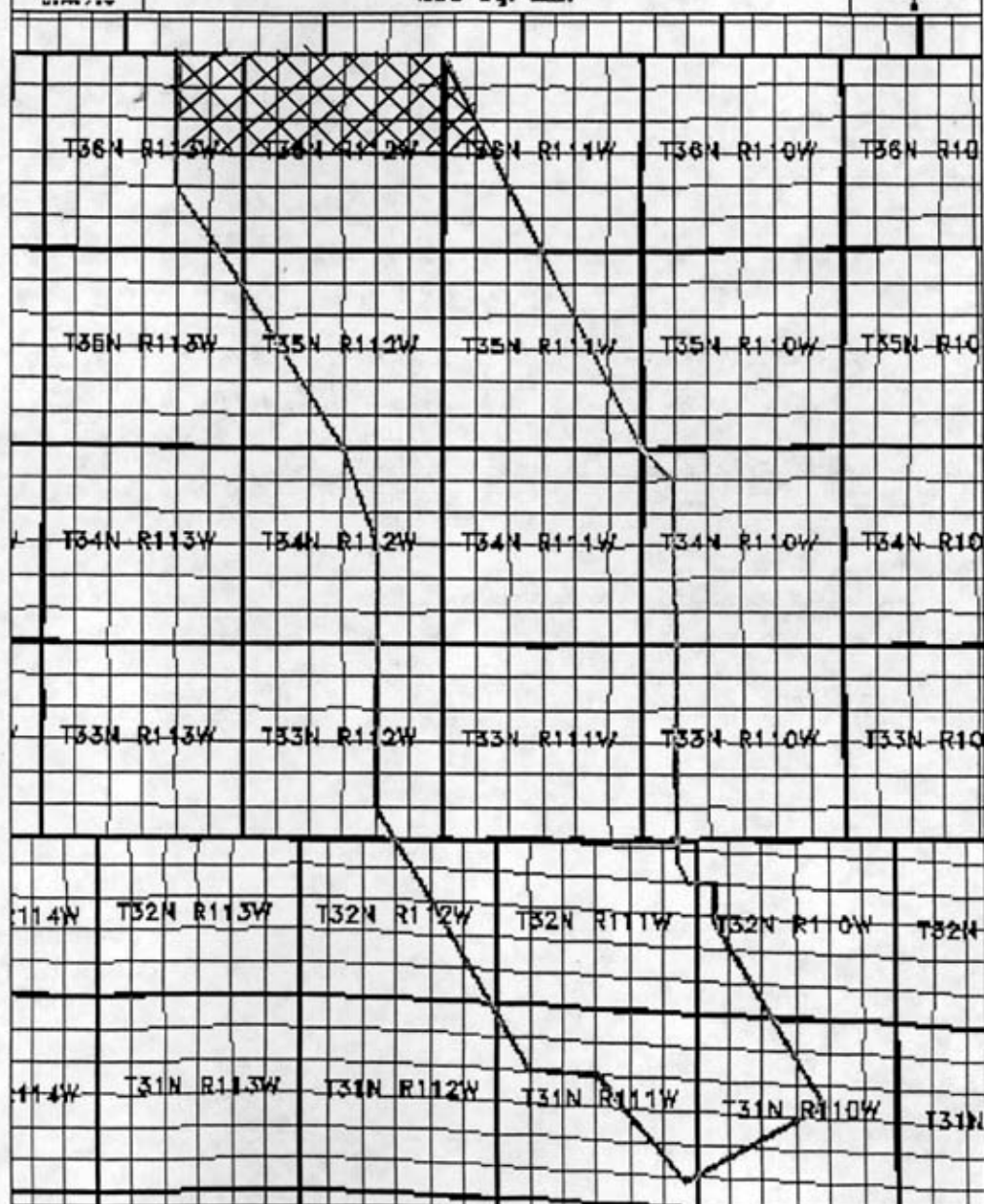
Please call me @ 713-201-9924 if you need anything further or E:mail me @ mldighans@cs.com.

Thank you,

Mike Dighans, Consultant
Veritas DGC Land Inc.
OFF: 307-367-3058
CELL: 713-201-9924



Merna Non-Exclusive 8D Survey
Sublette County, Wyoming
290 sq. mi.



VERITAS DGC LAND INC.
Merna ~~HAY RESOURCES~~ 3-D
PLAN OF OPERATION

A Notice of Intent to conduct geophysical operations is being filed by Veritas DGC Land Inc. in the Pinedale Resource Office for the Merna 3-D in Sublette County, Wyoming and this plan of operation is to cover the ground operations of that NOI. This survey will encompass +/- 201.0 square miles. There is 59 square miles of BLM owned land and 142 square miles of private owned land in this project.

Due to the large amount of hay fields within the project we will need to vibrate in those areas when the ground is frozen in the winter months. We feel that late November thru January is the best time of year to accomplish this. We will work to limit as much activity as possible within the Winter Range, but I don't see any way to completely avoid it on BLM owned lands by November 15th. If possible we will need a waiver on the Winter Range in order to complete our survey in the time frame required by the private landowners.

Veritas will be using several survey crews to stake the source and receiver points in this project. If permit conditions allow, Veritas would like to start survey crews sometime in September after the final cutting in the hay fields, depending of the permit constraints of the private landowners. All survey crews are utilizing 4 wheelers/quads to survey the source and receiver lines.

Veritas uses a helicopter to deploy "bags" of equipment at predetermined locations on the receiver lines. In each bag there is enough equipment (an analog to digital conversion box, a battery, (6) 230 foot cables and 54 geophones with 2.5 inch spikes) to cover 6 receiver stations or approximately 1400 feet of ground. Layout crews consist of five workers each, which unload the bags and lay the equipment out on foot. As the equipment is being deployed it is being troubleshooted by the recorder and the layout crew, who are on foot. If there is a need to do further troubleshooting to the equipment, a troubleshooter using a 4 wheeler will be utilized. The same method is used to pick this equipment up. There will be only 4-wheeler traffic on receiver lines crossing BLM lands other than those areas needed by the buggy vibrators or buggy drills to access the next source line.

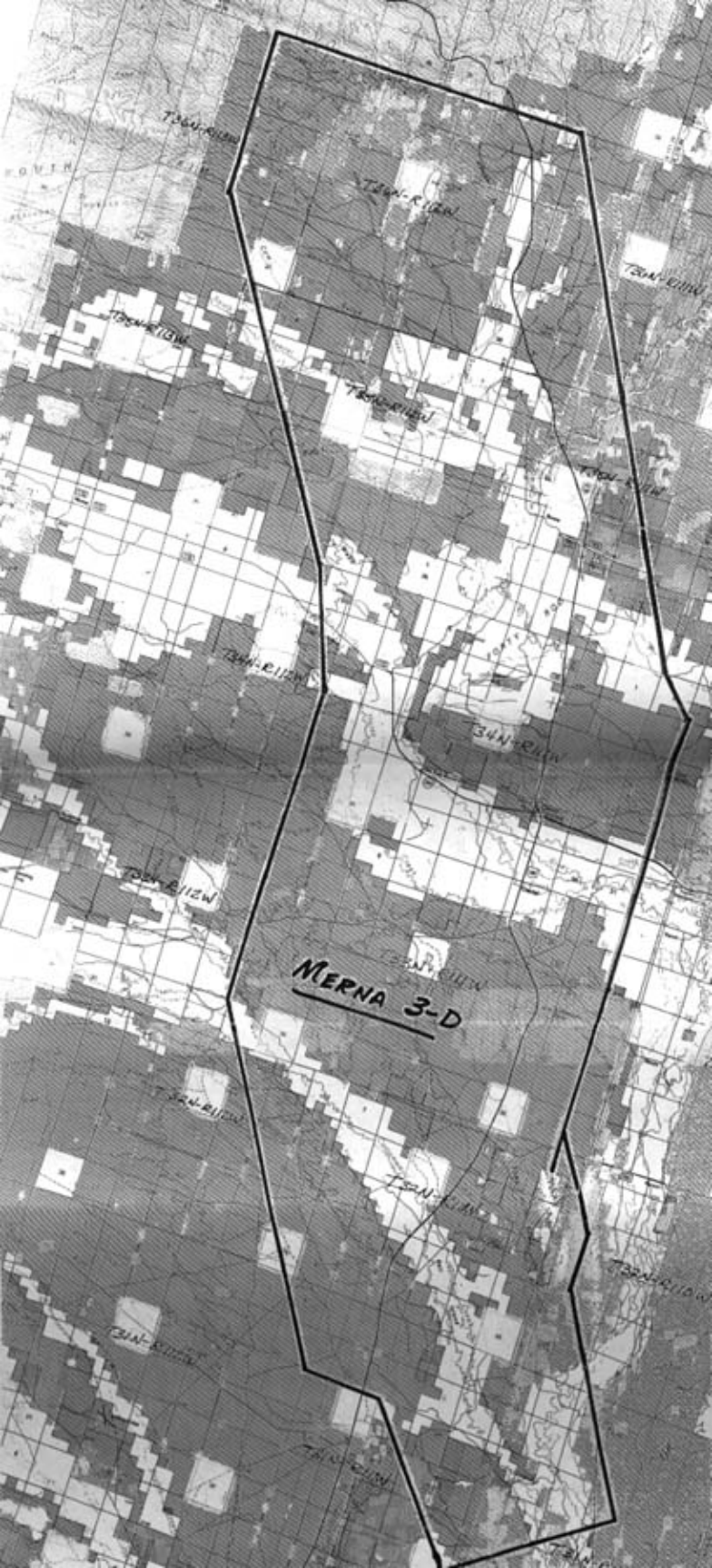
Veritas is planning to use a set of four to six buggy mounted vibrators as an energy source. Although these machines are ~65,000 pounds, they run on all terrain low ground pressure tires to minimize surface impact. Each vibrator will be equipped with 48 inch Terra tires which gives them, a PSI of around 9 pounds.

The buggy vibrators will run four abreast along the source lines, with two buggies on each side of the source point. In some cases we may use, two sets of vibrators to facilitate a more efficient operation. Each set will be used on a separate source line and will not cause any more tracks to be made.

They will start where the source points intersect the first receiver line and follow the source line across the next receiver line, continuing to the third receiver line. At the third receiver line they will follow it to the next source line and continue along the source line, across the next receiver line, continuing to the third receiver, which they will follow to the next source line and so forth.

The buggy vibrators will run abreast at all times, except in areas where one set of tracks is needed to go avoid an area of specific concern, or if requested by the BLM AO.





Merna 3-D

T34N-R12W

T34N-R12W

T34N-R12W

T34N-R12W

T34N-R12W

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T34N-R12W

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SOUTH

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0162
Expires: August 31, 1993

BLM Case No.
WVW-155092
State Case No.
3502006

NOTICE OF INTENT TO CONDUCT OIL AND GAS
GEOPHYSICAL EXPLORATION OPERATIONS

Company Name VERITAS DGC LAND INC.		Project Name MERNA 3-D	
Address 10300 TOWN PARK		Type of Bond NATIONWIDE	Amount \$150K
City HOUSTON	State TEXAS	Bond Number/Where Filed 5853137	Co. BLM State of TX
Zip Code 77012	Phone No. (include area code) 832-351-1057	Crew Number	
M.L. Digheans 713-201-9924		Julie Gordon LOCAL INFORMATION	
Contractor/Client SAME AS ABOVE		Crew Chief	
Address		Address P.O. Box 2115	
City	State	City PINEDALE	State WYO.
Zip Code	Phone No. (include area code)	Zip Code 82941	Phone No. (include area code) 307-367-3058

I hereby file this Notice of Intent to Conduct Oil and Gas Geophysical Exploration Operations across and upon Public Lands (give description of lands by Township(s), Range(s), and Section(s)): A map shall be furnished showing the approximate location of the lines to be used on Public Lands. The map shall be of a minimum scale of one-half inch to the mile for the general location, and should be at least two and one-half inches to the mile for specific project location to accompany the Notice of Completion. **T36N-R11W: Sec. 7, 8, 18, 20, 29, 32-34. T36N-R11W: Sec. 13.**

T36N-R11W: Sec. 2, 3, 5-10, 13-15, 18, 19, 21, 23.
T35N-R11W: Sec. 3-5, 8, 9, 17-20, 29, 30.
T35N-R11W: Sec. 21-30, 32-35.
T34N-R11W: Sec. 7, 17-20, 29.
T34N-R11W: Sec. 11-15, 19-24.
T34N-R11W: Sec. 1, 2, 11-15, 22-27, 34, 35.
T33N-R11W: Sec. 6, 8, 17-20, 29-32.
T33N-R11W: Sec. 1, 7-35.
T33N-R11W: Sec. 13, 10-15, 22-26, 35.
T32N-R11W: Sec. 1-4, 6, 7, 13-15, 18-25, 28, 34.
T32N-R11W: Sec. 6, 7, 17-21, 28-33.
T31N-R11W: Sec. 1, 3, 11, 12-15, 17, 22-25.
T31N-R11W: Sec. 4, 6, 7, 9, 10, 15, 17-22, 28-33.
T32N-R11W: Sec. 9-11, 13, 15, 22-26, 35.

Approximate Date of Commencement of Operations: **JULY SURVEY - SEPT. RECORD**
The type of operation to be conducted is:

TECHNIQUE

- ☒ Shothole
☒ Vibroseis
☐ Other (explain)

METHOD

- ☐ Surface shot
☐ Truck Mounted
☒ Portable
☒ Buggy

Type and amount of Explosive: **PENTOLITE 30 lbs. MAX.**
Shotpoint pattern: **ZIG-ZAG 311' SPACING**
Shothole Depth: **120' MAX**
No. Source Points/Mile: **16-17 PER LINEAR MILE**

Provide diagram if multi-hole pattern:

The undersigned agrees that the oil and gas exploration operations shall be conducted in compliance with all Federal, State and local laws, ordinances or regulations which are applicable. Federal regulations are contained in 43 CFR 3150. The Crew Chief, Party Manager, or other responsible representative shall attend a pre-work conference prior to entering onto the public land to sign the general terms and conditions relative to this project, and any site specific special conditions developed by the local Authorized Officer.

M.L. Digheans
LOCAL 307-367-3058
CELL- 713-201-9924
(Signature of Appropriate Geophysical Representative)

(Signature of Bureau of Land Management Authorized Officer)

Consultant
(Title)

(Title)

JUNE 4, 2002
(Date)

(Date)

Veritas plans to run a 24/7 operation and most of our vibrating will be done at night with the recording equipment being laid out and moved during daylight hours.

Once an area has been vibrated, pickup crews will pickup and load equipment into bags. Bag runners, who are either on foot, or if terrain permits, on a 4- wheelers, will hook the bags onto the helicopter to be moved to a new location. All garbage is picked up and loaded from receiver lines by the crews.

On the source lines an ATV 4 wheeler is sent back to pick up flagging and lath. This garbage detail is kept current with the crew's progress.

Veritas will be setting up a staging area for the deployment of equipment and a helicopter loading zone. This staging area consists of high boy equipment trailers, helicopter fuel storage and parking for crew transport vehicles. Staging areas will be located on previously disturbed areas, well pads or on the private or state sections within the project. If the staging area is planned on BLM land, you will be notified of each location and your approval received, prior to using the location.

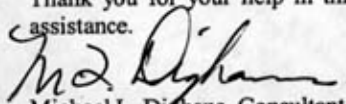
A recording truck or "Doghouse" that houses the recording instruments will be used. This truck records the energy being generated from the vibrators through the receiver lines and it is typically stationary throughout the day.

All support vehicles will be restricted to the existing roads and trails in order to limit off-road traffic. The 4 wheelers, buggy vibrators and buggy drills will be the only vehicles that need to travel across country, along the source lines.

The receiver lines run east-westerly and the source lines will be diagonal or zig-zag between the receiver lines. The design is not final at this time. Vibrator point, shot-point interval will be at a diagonal 220 foot interval, which will make them 311 feet apart on a straight line.

We plan on using shot-holes to obtain data in areas which have restricted access or steep terrain or thick trees, where we are unable to gain access with vibrators. Vibrators will be the main source used on this project.

Thank you for your help in this endeavor, and please call me if you need further information or my assistance.


Michael L. Dighans, Consultant
Veritas DGC Land Inc.
PH: (713) 201-9924



Appendix B

(Veritas letter regarding all-heliportable alternative)



August 13, 2002

Bureau Of Land Management
P. O. Box 768
Pinedale, WY 82941-0768

Attention: Priscilla Mecham

Re: Merna 3D

Dear Ms. Mecham,



Veritas Land Surveys has considered the option to record the Merna 3D using an explosive shot hole source as opposed to the vibroseis method. The use of helicopter transported drills was also considered. The helicopter transported drill method would reduce the need for truck mounted or buggy mounted drill rigs. Our analysis included three criteria including time, cost and impact to BLM mineral lessees.

There are approximately 19,080 source locations within the 265 square mile Merna 3D. We plan to have approximately 72 source locations per square mile. We considered five to ten pounds of explosives loaded in a sixty (60') foot shot hole.

Each shot hole would take approximately one to two hours to drill including transportation to and from each shot hole. The smaller and lighter heli-drills may average five shot holes per day. Using ten heli-drills, production could average fifty holes per day. It would require over twelve months of continuous drilling with no weather days or other downtime to complete the drilling phase. Twenty drills would reduce this drilling window by fifty percent if twenty heli-drills could be found. The recording phase will be completed in two to three months. The disturbance to wildlife would last much longer (14 months) if the shot hole method were required. Winter Range considerations would require leaving loaded shot holes between November 15, 2002 and July 31, 2003. The shooting window is only three and a half months long, July 31 thru November 15. The 265 square mile project would be spread over three seasons if helicopter assisted drilling was utilized.

Shot holes drilled by helicopter transported drills cost \$1200 per shot hole. The vibroseis method will cost \$5,875,000. The shot hole method with helicopter transported drills will cost over \$20,000,000.



Adverse impacts to BLM lessees are both temporal and monetary. Heli-drilling will delay the completion of this project until 2003 or 2004 when factoring wildlife issues for the period between November 15 and July 31. The significant increase in costs will change the economic viability for this project. Oil & gas drilling will be delayed or continued without the benefit of 3D geophysical data. Dry holes will be needlessly drilled at a significant impact to BLM, state and private lands. Oil & gas drilling success at Jonah reflects the value of 3D geophysical data. The positive financial income for both the State and Federal governments is publicly available. Ninety-nine percent of the BLM, private and State mineral interests within our 3D program are leased to exploration companies who have paid for the right to evaluate their leases. **This 3D project is non-exclusive and will be available to all explorations companies, thereby eliminating the need for multiple 3Ds over the same area.**

In conclusion, while Veritas Land Surveys believes helicopter transported drilling is possible, we do not believe the impact to BLM, private or State lands will be reduced. In fact, more equipment will spend more time on BLM land as a result of not using the vibroseis method. Heli-drilling will quadruple costs and render this project non economic. Our participants would not bear the additional costs and therefore the project would be terminated.

Regards,

Richard L. Trevino
Veritas Land Surveys
832.325.1051

Appendix C

(Scoping Notice & Comments Received)

(For responses to comments, see Appendix 1 of the Decision Record)

PUBLIC ASKED TO REVIEW A GEOPHYSICAL PROPOSAL

The BLM Pinedale Field Office recently received a Notice of Intent to Conduct Geophysical Operations from Veritas DGC Land Inc. to conduct a 3D geophysical project within the Pinedale Field Office area.

The northern end of the Merna 3D project area would about the southern boundary of the Bridger-Teton National Forest for about 8 miles, 2 miles north of Kismet Peak. The southern end of the project would be near the confluence of the Green River and Cottonwood Creek. Prominent features within the project boundary include Daniel and Daniel Junction, Forty Rod Flat, Grindstone Butte, Ball Island, and Soap Hole Basin. The project area would vary from 4 to 9 miles east-west and would be approximately 35 miles north-south. Total surface area within the project boundary would be approximately 290 square miles. Roughly 37 percent of the project would occur on BLM administered land. The rest would be on state or private lands. Those portions of the project occurring on state and private lands are not subject to BLM authorization. Veritas will contact individual landowners for permission.

The bulk of the geophysical operations would be conducted by vibroseis buggies, ATVs, and helicopters. The vibroseis buggies would operate in an off-set or side-by-side pattern and would be equipped with all-terrain, low ground pressure tires to minimize surface impact. The off-set / side-by-side pattern is designed to prevent multiple passes over the same piece of ground. In the minority of the project area where terrain is rough, too soft to support vibroseis buggies, or otherwise inaccessible to vibroseis units, drills would be used to set subsurface charges. This operation type would be used as necessary in the Soap Hole Basin, hayfields, and in other areas where determined by permit constraints. Drills of various types would be used, transported by lightweight buggies, ATVs, helicopter, or by foot as appropriate. The recording cable and geophones would be deployed by helicopters, ATVs and people on foot. Recording operations are scheduled to commence in early September and would continue for approximately 3 ½ to 5 months.

Known environmental and resources values in the project area include: rural subdivisions, visual resources, crucial big game winter range for mule deer, antelope, and moose; elk feedgrounds; elk calving habitat; raptor nesting habitat; sage grouse nesting habitat, sage grouse leks; fisheries; cultural resources; the Prairie of the Mass, Fort Bonneville, and Green River Rendezvous sites; sensitive soils; slopes steeper than 25%; wetlands/riparian habitat, potential habitat for Threatened and Endangered and sensitive plant and animal species; recreational use; the Upper Green River Special Recreation Management Area, and heavily forested areas.

BLM is soliciting substantive input from the public relating to issues, technological advances, analysis data, and the accuracy of inventory information to be used in the environmental assessment. Comments should be sent to: Priscilla Mecham, Pinedale Field Office, P.O. Box 768, Pinedale, Wyoming, 82941. Comments are due by close of business July 15, 2002. These comments, including name and address, would be available for public review. If you wish to withhold your name and/ or street address from public review or from disclosure under the Freedom of Information Act, you must state this prominently at the beginning of your written comment. Such requests will be honored to the extent allowed by law.

If you have any questions concerning this project, please contact Bill Lanning at the Pinedale BLM at (307) 367-5318.

Appendix D

(Grazing allotments affected)

South Ridge Soapohole	02131	Green River Unit Ind.	02167
Daniel Ridge Ind.	02000	Fish Hatchery Ind.	22014
Heifer Pasture Ind.	22019	Canyon Ditch Ind.	02158
Lower Pasture Ind.	12017	Noble Cora Peak Common	02160
Isolated Tracts Ind.	22018	Cora Peak Ind.	02054
Lower Bench Corral	02084	West Cora Peak Ind.	02164
Soapohole Common	12119	James Ryegrass	12102
Spade Ind.	02072	Chapel Ind.	02041
Horse Creek Pasture #1	02070	Lander Cutoff	32224
North Hoback Rim Ind	02169	Cottonwood Meadows	02042
Jewett Ryegrass Ind.	02188	Round Valley Ryegrass Ind.	12205
189 Muddy Meadow Ind.	02187	Bench Corral Ind.	02062
Muddy Corral Ind.	02186	School Section Ind.	02066
40 Rod Common	22002	Grindstone Soapohole	02143
Mesa Common	02031	Beaver Horse Creek	02152
Marincic Mesa Ind.	12132	Webb Draw Pasture	02101
Hoback Rim	02151	J&K Daniel Ridge	12107
S. Ridge Soapohole Common	02131	Ryegrass Ind.	02059
Cottonwood Gap	12217	Ryegrass Isolated	02060
Miller Piney Ind.	02149	Reservoir Pasture	12103
Miller Daniel Ridge	02148	Webb Home Pasture	12106
Daniel Y	02147	Miller Home Place Ind.	02178
		Q5 Soapohole	02174

Appendix E

(Standard Conditions of Approval

and

Special Terms & Conditions)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0162
Expires: October 31, 2002

TERMS AND CONDITIONS FOR NOTICE OF INTENT
TO CONDUCT GEOPHYSICAL EXPLORATION

BLM Case No.

State Case No.

Company Name		Date NOI Filed	
Address		Company Project Name	
City	State	Client	
Zip Code	Phone No. (Include area code)		Crew Number

GENERAL

1. A copy of the approved Notice of Intent to Conduct Oil and Gas Geophysical Exploration Operations and Terms and Conditions shall be kept in the field with each seismic crew.
2. The BLM shall be notified at least 3 days and no more than 14 days before entering onto public lands. If conditions have changed, additional terms and conditions may be necessary.

3. The operator is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are discovered, the operator is to immediately stop work that might further disturb such materials, and contact the Authorized Officer (AO). Within five working days the AO will inform the operator as to:

- Whether the materials appear eligible for the National Register of Historic Places;
- The mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and,
- A timeframe for the AO to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

4. If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume operations.

5. Due care must be taken to safeguard all livestock, wildlife, and wild horses in the vicinity of the exploration operations. Measures to mitigate adverse effects on protected or threatened/endangered species will be determined by the AO after consultation with the operator.

6. Operations shall be suspended when in the judgment of the Authorized Officer they have the possibility of unduly harming the surface during periods of wet weather.

7. Range improvements (fences, reservoirs, etc.) or land treatment projects (contour furrowing, seeding, or range monitoring sites) shall not be disturbed or altered without prior written approval of the Authorized Officer.

8. Federally owned or controlled water shall not be used without written permission of the Authorized Officer.

9. All fires set or caused as a result of these exploration operations shall be extinguished without expense to the government. All fires shall be reported to the BLM as soon as possible.

10. The operator shall notify the Authorized Officer in writing of any changes in the original application and secure written approval for the changes before proceeding.

11. When it is determined that activities will come closer than one quarter (1/4) mile of developed recreation sites, historic trails, springs or flowing water wells the Authorized Officer will be consulted to determine if the action is permissible.

12. Advanced written permission shall be obtained before conducting surface disturbing activities. This includes, but is not limited to: towing with a tractor, blading, dozing, snow removal, and vegetation removal.

13. Powder magazines and explosives shall be stored and handled according to U.S. Bureau of Alcohol, Tobacco and Firearms (ATF) standards. As required by ATF, loaded shotholes shall not be left unsecured.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any Department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on reverse)

RECLAMATION/CLEANUP

1. Reclamation of disturbed areas shall be done concurrently with the geophysical operation, in-so-far as possible.
2. Shallow hole plugging shall be completed using the guidelines developed by the appropriate State/local regulatory agency or agencies and the Bureau of Land Management State Office. The requirements vary from State to State; therefore, those specific to the State the project is being conducted in will be followed.
3. Where appropriate, disturbed areas shall be reseeded, as directed by the Authorized Officer, until vegetative cover is established that is commensurate with pre-survey conditions. In areas where reseeded is not appropriate, the authorized officer shall determine what steps should be taken.
4. All trash, flagging, lath, etc. shall be removed and hauled to an authorized disposal site.
5. No oil or lubricants shall be drained onto the ground surface.
6. The operator shall notify the Authorized Officer of the date operations are completed.

COMPLETION OF PROCEDURES

1. A Notice of Completion (NOC) (Form 3150-5) shall be filed within 30 days of completion of operations including reclamation. A map (minimum scale of 1:24,000) must be attached to the NOC showing public lands crossed and the final location of source points.

I understand and agree to comply with these terms and conditions and any attached special conditions.

(Signature of Appropriate Representative)

(Date)

☐ Special Conditions Attached

NOTICE

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this Notice of Intent to Conduct Geophysical Exploration Operations.

AUTHORITY: 30 U.S.C. 181 et seq.

PRINCIPAL PURPOSE: The information will be used to process your Notice.

ROUTINE USES: (1) The processing of the operator's Notice of Intent to Conduct Geophysical Exploration Operations. (2) To determine that mitigating measures are made to protect the environment. (3) Transfer to appropriate Federal agencies when concurrence is required prior to granting a right in public lands or resources. (4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions.

EFFECT OF NOT PROVIDING INFORMATION: Disclosure of the information is voluntary. If all the information is not provided, your right to conduct geophysical exploration activities may be revoked.

The Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.) requires us to inform you that:

This information is being collected in accordance with 43 CFR 3151.

This information will be used to process geophysical exploration notices.

Response to this request is required to obtain a benefit.

BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT

Public reporting burden for this form is included in the burden hours allocated in Form 3150-4, "Notice of Intent to Conduct Oil and Gas Geophysical Exploration Operations," including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing of the form. Direct comments regarding the burden estimate or any other aspect of this form to the U.S. Department of the Interior, Bureau of Land Management, Bureau Clearance Officer, (WO-630), 1849 C Street, N.W., Washington, D.C. 20240, and the Office of Management and Budget, Desk Officer for Interior Department, Office of Information and Regulatory Affairs, 1004-0162, Washington, D.C. 20503.

Special Terms & Conditions of Approval - Veritas Merna 3D Geophysical Project

If project field activities are proposed for the period between November 15 through March 15, Veritas shall provide BLM with a bald eagle winter roosting survey of potential roost areas to be affected during this period (per PAPA EIS ROD p. A-19 and adaptation of T&E decision at PRA RMP ROD p.59). Bald eagle roost avoidance requirements apply to both federal and non-federal lands.

Veritas shall provide the BLM with a Canada Lynx Biological Assessment report for the aspen and lodgepole pine forest cover types in T36N, prior to any activity in that area. (See EA Map 6). The Assessment must be prepared by a qualified biologist, and address all potential project impacts to Canada lynx or their habitat. Based on report review, the BLM in consultation with the USFWS will determine the need for any additional measures which would be applied before approval of that project increment (adaptation of T&E decision at PRA RMP ROD p.59). This stipulation applies to both federal and non-federal lands.

Geophysical operations will not be allowed on antelope crucial winter range, mule deer crucial winter range, elk winter range, or elk feedgrounds from November 15 through April 30 (PRA RMP ROD pp. 10 and 58). Modifications to this limitation may be applied for in writing to the BLM Pinedale Field Office.

No geophysical operations (helicopter, pedestrian, or land-vehicle) are permitted within a half mile of the Franz elk feedground during elk occupation, approximately Nov 1- April 30.

Between November 15 and April 30, moose crucial winter range willow riparian habitat areas (especially along Horse Creek, Beaver Creek, and the Green River) should be avoided to the extent practicable, by 1) minimizing helicopter overflights, 2) raising any overflights which are necessary to an altitude of at least 300 ft, and 3) hand-laying receiver lines (PRA RMP ROD pp. 10 and 58 modification/adaptation, and WG&FD letter of 7/8/02).

To avoid conflict with antelope and mule deer migration routes, particularly heavily used migration corridors, final selection of stationary project activity areas (recording truck, staging, and heli-pad areas) on non-federal land will be made by Veritas in consultation with the BLM Authorized Officer and WG&FD. (see EA map 3 and WG&FD letter of 7/8/02 in Appendix C)

During project survey/staking, Veritas surveyors shall identify and indicate on a map all prairie dog burrows/mounds found along or within the proposed source and related travel routes (adapted from PRA RMP ROD p. 59). Note that this stipulation applies to both federal and non-federal lands.

Veritas surveyors shall locate all source points at least 50 m (150 ft) from all prairie dog burrows/mounds. Receiver cables and geophones may be placed within the prairie dog towns. Note that this stipulation applies to both federal and non-federal lands in the project.

Should the operator wish to place source points closer than 50 m to an active prairie dog burrow, Veritas shall provide BLM with a prairie dog town inventory report covering all areas within 5 miles of the colony to be impacted, per USFWS Ferret Inventory Guidelines (USFWS 1989). Note that this stipulation applies to both federal and non-federal lands. Based on the prairie dog town inventory report, the BLM Authorized Officer shall determine whether any areas meet black-footed habitat criteria.

Should prairie dog colonies/complexes in the project area meet ferret habitat criteria, Veritas shall use a qualified biologist to conduct a black-footed ferret search per established guidelines (ibid.). Daytime/snow searches for ferret sign may be conducted from December 1 - March 31 and nocturnal ferret searches may be conducted from July 1-October 31. If a black-footed ferret or its sign is found, all action potentially affecting the colony/complex shall cease, and further action will be subject to USFWS guidance and/or restrictions (ibid.). This stipulation applies to both federal and non-federal lands.

To protect wildlife cover, vehicle traffic shall, where practicable, avoid stands of tall sagebrush. Stands of tall sagebrush are defined as areas in which the majority (more than 50%) of sagebrush plants are 2 ft or taller.

Veritas shall provide a Class III cultural resource inventory for all public lands where off-road vehicle travel will occur. The inventory shall cover 50 feet either side of the centerline of off-road travel routes, for a total inventory coverage of 100 feet. Such inventory will not be required for areas covered by previous inventories, provided those inventories meet current standards. The cultural resource inventory will be designed to locate and prescribe avoidance routes or other mitigation for all significant or unevaluated sites, previously recorded as well as newly discovered. Standard site avoidance entails a 30 meter (100 foot) buffer zone around all eligible and unevaluated sites. Sites determined by BLM to be ineligible for nomination to the NRHP require no further action.

Veritas's archeological consultant shall obtain a cultural resource files search print-out from the SHPO Cultural Records Office shortly before commencing fieldwork. Based on this, the consultant will identify previously recorded significant and unevaluated cultural resource sites on federal and non-federal lands in the project area. Using site form copies obtained from SHPO, the consultant will plot these sites onto the M3D project map for Veritas, who is requested to arrange avoidance for these properties.

No vehicle operations shall be conducted on any found segments of the Opal Wagon Road. These segments shall be avoided by the standard 30 m buffer zone. Project vehicles may cross segments of the Wagon Road only at existing two-track or improved road crossings, or other areas of disturbance.

Veritas shall prepare a specific plan of operations regarding activity within the Green River Rendezvous National Historic Landmark (NHL), which lies on private land. After the plan has been approved by the owner(s) of the NHL, the plan shall be submitted to the BLM Authorized Officer for review, at least 2 weeks prior to field operations in that area. BLM will consult with the SHPO, NPS, and ACHP as appropriate, and append special conditions of approval to this NOI as necessary to protect the National Landmark.

All cairn and 'tipi ring' sites shall be avoided by 300 ft. All Traditional Cultural Properties, rock art and unusual rock alignment sites (such as altars or medicine wheels) shall be avoided by 0.25 miles. All burial grounds shall be avoided by 1 mile. Within these avoidance buffers, vehicular traffic is permitted on existing roads. Off-road travel is limited to pedestrians. Geophone cables may be hand laid through these areas by pedestrians.

If vertebrate paleontological resources (fossils) are discovered on BLM land during project operations, Veritas must suspend operations which could disturb the materials, and immediately contact the BLM Pinedale Field Office Authorized Officer (AO). The AO will arrange for evaluation of the find within 5 working days and determine the need for any mitigative actions. Any mitigation would be developed in consultation with Veritas, who may be responsible for the cost of site evaluation and mitigation of project effects to the site. If the operator can avoid disturbing a discovered site, there is no need to suspend operations, however the discovery must be brought to the attention of the BLM Authorized Officer as soon as feasible.

Off-road buggy vib and drill traffic on BLM land shall be confined to a corridor 100 ft wide (50 ft either side of centerline) along travel routes lines which have been inventoried for cultural resources (refer to archeological inventory map).

The geophysical operator shall off-set side-by-side all off-road vehicle traffic over a 50-foot wide swath on either side of the planned travel route centerline, so that one vehicle does NOT drive the same path as another vehicle.

No vehicle operations (buggy vibes, recorder trucks, pickups, ATVs) will be allowed on slopes of 25 percent or greater.

The operator shall conduct **no** vehicle operations during periods or in areas of saturated ground when surface rutting could occur.

On boggy alkaline soils in the Soap Holes Basin, Veritas will utilize buggy drills with full flotation tires and will hand-rake the ground surface to approximate original contour and appearance within 5 days of drilling each shothole.

To protect water developments, vibroseis source points shall be located a minimum of 300 ft from all water wells and dammed reservoirs. Shot-holes shall be located from these same facilities no closer than 300 ft, or the distance prescribed in H-3150–1 Illustration 10, p.2. (distance dependent on charge and depth), whichever is more.

Vibroseis source points shall be located a minimum of 300 ft from oil /gas wells and pipelines, unless written permission to encroach closer has been given by the owner/operator. Shot-holes shall be located from these same facilities no closer than 300 ft, or the distance prescribed in H-3150–1 Illustration 10, p.2. (distance dependent on charge and depth), whichever is more.

To protect artesian water flows, no source operations are allowed within 300 feet of springs or seeps. Vibroseis points may be no closer than 300 ft. Shot-holes shall be located from spring and seeps resources no closer than 300 ft, or the distance prescribed in H-3150–1 Illustration 10, p.2. (distance dependent on charge and depth), whichever is more. Shot-holes drilled into or through water-bearing zones shall be sealed with bentonite as prescribed through WOGCC regulations.

Any facilities damaged, destroyed or removed in connection with this geophysical exploration operation shall be immediately restored to original condition or replaced with a similar facility.

No trees may be cut or broken. Vehicles may not drive on or over willows.

The geophysical operator shall reclaim and reseed any areas where their operations have caused unplanned surface rutting or have otherwise removed all of the surface vegetation, as directed by the Authorized Officer.

To prevent the introduction of new weeds, the geophysical operator shall thoroughly power-wash all field vehicles (buggy vibes, pickups, ATVs, etc), particularly their undercarriages, before transporting them to the project area.

To quarantine an area of the Soapholes with weed problems, any vehicle associated with the project and working between Highway 189 and the Green River, north of Cottonwood Creek and south of Grindstone Butte, shall be thoroughly washed before entering and before leaving this area. Approved exit points from the described area are located at the intersection of Hwy. 189 and Sublette County Road 146 and the intersection of Hwy 189 and Sublette County Road 147. Equipment washing shall occur at or near these approved

exit points. This stipulation applies to all vehicles driving off-road within this area.

Project vehicles may not enter bodies of water (e.g, streams, reservoirs) on BLM lands. Vibe-buggies are not allowed on riparian areas.

Stream or river crossings on private or State land would be at the discretion of the landowner. The Wyoming Department of Environmental Quality (DEQ) Water Quality Division provided the following guidance for previous geophysical projects.

- a) Fording the stream is acceptable, however, vehicles and equipment should not push or pull material along the streambed below the existing water level. Frequent fording should not occur in areas where it will create extensive turbidity. If temporary crossing structures are used, they should be designed to handle possible high flows that could be anticipated during the survey period. All temporary structures must be completely removed from the stream channel at project conclusion and the area restored to a natural appearance.
- b) The operator must take care to cause only the minimum necessary disturbance. Protect streambank vegetation except where its removal is necessary for completion of the work.
- c) The operator must take care to prevent any petroleum products, chemicals, or other deleterious materials from entering the water. All equipment operated within any stream channel, pond, or wetland should be clean and free from fuel or leaks.

The geophysical operator shall clean up all diesel, hydraulic fuel, or other spills, including contaminated soils. All spill-related material shall be hauled to a Wyoming DEQ approved disposal site. Spills resulting from ruptured pipelines or well casings shall be cleaned up as directed by DEQ and the facility owner/operator.

Veritas shall notify grazing lessees prior to entering upon their allotments. Addresses of affected grazing lessees will be provided by BLM.

Veritas shall make every effort to avoid disturbing or altering fences. Gates shall be used when possible. Gates must be closed immediately after passing through them. If a fence must be crossed, it shall be let down or cut (as determined by the owner), crossed, and immediately put back up. The wires shall be stretched to the original tension from the nearest brace or gate panel.

Activity within the (fenced off) Daniel Landfill facility in Section 23, T34N- R111W shall be limited to the pedestrian placement of geophones.

No off-road vehicle traffic is permitted on BLM lands within one-quarter mile of the Warren Bridge Campground as depicted on Map 8. Vehicle operations, including vibrating, are allowed on existing well established roads in the buffer area, but 300 ft outside the campground proper. Geophone cables may be set off-road in the area by pedestrians.

No off-road vehicle traffic is permitted within the Upper Green River Special Recreation Management Area as depicted on Map 8. Vehicle operations, including vibrating, are allowed on existing well established roads, and geophone cables may be placed off-road within the area by pedestrians.

Helicopter flights over and near the Warren Bridge Campground and Upper Green River Special Recreation Management area should be avoided as much as possible, if the facilities are occupied.

Operations within 1/4 mile of the Warren Bridge and Upper Green River campground sites may be conducted only during daylight hours.

Geophone cables placed across all navigable streams shall be sufficiently weighted to ensure that they sink to the bottom of the channel.

All source (vibroseis and shot) points shall be located a minimum of one-quarter mile from residences, unless written permission to encroach closer has been given by the resident (application of special resource mitigation guideline at PRA RMP ROD p. 60).

Should the project schedule change, the following measures would apply:

If project field activities are proposed for the period between February 1 through August 15, Veritas shall provide BLM with a current active raptor nest survey of areas to be affected during this period. From February 1 through May 31 (nest selection period), geophysical operations shall not be allowed on BLM-administered lands within a 0.5 mile radius of raptor nests occupied this year or within the last 3 years, except for ferruginous hawk nests for which the seasonal buffer is 1 mile. From June 1 through July 31 (rearing period), geophysical operations will not be permitted on BLM-lands within a 0.5 mile radius of occupied raptor nests, except ferruginous hawk nests, for which the seasonal buffer is a 1.0 mile radius. Modifications to this limitation may be applied for in writing to the BLM Pinedale Field Office. (adapted from PRA RMP ROD p. 59)

Seasonal restrictions for occupied bald eagle nests apply from February 15 through August 15, with a 1.0 mile radius buffer zone (per PAPA EIS ROD p. A-19 and adaptation of T&E decision at PRA RMP ROD p.59). Bald eagle nest avoidance requirements apply to both federal and non-federal lands.

If activities are proposed to be conducted between March 1 through May 15, the geophysical operator shall provide BLM with a sage grouse lek survey report covering all areas to be affected during this period (per PRA RMP ROD pp. 10, 59 and related maintenance actions). Current lek / nesting survey data addressing parts of the M3D project area should be utilized as much as possible, and is available at BLM.

Geophysical operations will not be allowed within one-half mile of active leks between midnight and 9:00 am from March 1 through May 15.

Geophysical operations will not be allowed on BLM-administered lands from March 1 through July 31 within a two-mile radius of active sage grouse leks (per PRA RMP ROD pp. 10, 59 and PAPA EIS ROD p. A-19). Exception to this restriction may be applied for in writing to the BLM Pinedale Field Office.

If activities are proposed to be conducted between April 1 through July 31, the geophysical operator shall provide BLM with a sage grouse nesting survey report covering all areas to be affected during this period (per PRA RMP ROD pp. 10, 59).

All off-road-vehicle operations are prohibited from April 1 to July 31, to prevent occupied nests and fledglings of ground-nesting birds, including sage grouse, from being crushed. Modifications to this limitation may be applied for in writing to the BLM Pinedale Field Office. An exception may be granted if the geophysical operator ensures that all vehicles driving off road are preceded by a pedestrian 20-50 ft ahead during this period.

If activities are proposed to be conducted between April 10 through July 10, the geophysical operator shall provide BLM with a current mountain plover survey report covering all areas to be affected during this period (adapted from PRA RMP ROD p.59 and USFWS 2002 mountain plover guidelines). Note that this stipulation applies to both federal and non-federal lands. Operations will not be allowed within 100 meters of active mountain plover nests.

Accepted by: _____

date: _____